Before the
Public Service Commission of South Carolina

Docket No. 2022-89-G

Application of Piedmont Natural Gas Company, Incorporated for an Adjustment of Rates and Charges

Direct Testimony and Exhibits of Chris Bauer

On Behalf Of Piedmont Natural Gas Company, Inc.

Piedmont Natural Gas

April 1, 2022

Q. Please state your name and business address.

A. My name is Chris Bauer. My business address is 400 South Tryon Street, Charlotte, North Carolina.

Q. By whom and in what capacity are you employed?

A. I am employed by Duke Energy Business Services, LLC ("DEBS") as Director, Corporate Finance and Assistant Treasurer. DEBS provides various administrative and other services to Piedmont Natural Gas Company, Inc, ("Piedmont" or the "Company") and other affiliated companies of Duke Energy Corporation ("Duke Energy").

Q. Please describe your educational and professional background.

A. I received a Bachelor of Arts degree from Flagler College in 2003 and an MBA degree from the University of North Florida in 2004. I am a licensed Certified Public Accountant in the state of Florida. From 2004 to 2010, I worked in Deloitte's Audit and Enterprise Risk Services unit, providing financial statement and internal control services across various industries. In 2010, I joined Duke Energy as a Lead Audit Consultant in the Internal Audit Department. In 2015, I moved to Duke Energy's Investor Relations group where I served as a manager responsible for communicating the company's strategic, operating and financing plan to debt and equity investors and external stakeholders. In 2017, I moved to the Treasury department and served as both a Treasury Director and the Director of Credit & Capital Markets before assuming my current role in early 2021.

Q. Please summarize your responsibilities as Director, Corporate Finance and Assistant Treasurer.

A. I am responsible for financing the operations of Duke Energy and its subsidiary utilities such as Piedmont. This includes the issuance of new debt and equity securities and obtaining other sources of external funds. My responsibilities also include financial risk management for Duke Energy and its subsidiaries. Additionally, I maintain relationships with Duke Energy's commercial banks, the fixed income investor community, and the credit rating agencies.

Q. Have you previously testified before this Commission or any other regulatory authority?

A. No.

Q. What is the purpose of your testimony in this proceeding?

A. My testimony will address Piedmont's financial objectives, capital structure, and cost of capital. I will also discuss the Company's current credit ratings and forecasted capital needs. Throughout my testimony, I will emphasize the importance of Piedmont's ongoing ability to meet its financial objectives and the benefits to customers resulting from Piedmont maintaining financial stability and strong credit ratings.

Q. Do you have any exhibits supporting your testimony?

A. Yes, I have two exhibits. Exhibit_(CRB-1) shows the calculation of Piedmont's capital structure in this proceeding. Exhibit_(CRB-2) shows the derivation of the embedded cost of long-term debt.

Q. Were these exhibits prepared by you or under your direction and supervision?

A. Yes.

Q. Please provide an overview of your testimony.

A. Piedmont faces substantial capital needs over the next several years in order to continue its compliance with federal pipeline safety and reliability regulations and to construct new pipeline and distribution facilities in order to serve its growing South Carolina markets as discussed in greater detail in the testimony of Piedmont witness Brian Weisker. In order to meet these capital demands, the Company competes for capital in the open market and must appeal to both debt and equity investors to attract the capital it needs.

Investors have a variety of investment opportunities available to them and require a return commensurate with the risk they incur. Investors are less likely to invest in a company if they feel the expected return doesn’t fairly compensate for the perceived risk of the investment. A company with lower credit quality weakens its attractiveness as an investment opportunity relative to similarly situated companies with higher credit quality. For this reason, it is critically important that a company maintain strong investment-grade credit quality to assure its financial strength and flexibility and ensure access to capital on reasonable terms.

The Company's proposed rate increase will allow the Company to recover prudently incurred costs, to compete in the capital markets for needed capital, and preserve its financial standing with both equity and debt investors as well as the credit rating agencies, to the long-term benefit of customers.

Q. What role does capital structure and financial stability play in Piedmont's ability to provide safe, reliable, and economic natural gas service to its customers?

A. Financial stability and consistent access to capital are necessary for Piedmont to provide safe, reliable, and economical service to its customers. Piedmont strives at all times to maintain financial stability, including investment grade credit ratings, to ensure reliable access to capital on reasonable terms. Our ability to access needed capital on reasonable terms is supported by the following specific objectives of the Company: (a) maintaining a strong equity component in our capital structure; (b) pursuing timely recovery of prudently incurred costs of providing utility service; (c) maintaining sufficient cash-flows to meet our obligations; and (d) maintaining an adequate rate of return on common equity.

Q. What is Piedmont's proposed capital structure in this proceeding?

A. As shown on my Exhibit_(CRB-1), I recommend a capital structure consisting of 54.56% equity and 45.44% long-term debt.

Q. Why are you proposing this capital structure?

A. This capital structure represents an appropriate amount of risk due to leverage while minimizing the weighted average cost of capital. Approval of the proposed capital structure will help Piedmont maintain its credit quality, the importance of which I will describe in subsequent sections of my testimony and is consistent with Duke Energy's target credit ratings for Piedmont.

As shown in Exhibit_(CRB-1), Piedmont's capital structure as of March 31, 2022 is projected to be 54.56% equity and 45.44% long-term debt.[1] This is the basis for the proposed capital structure for rates established in this proceeding, which is also consistent with the March 31 timing used for annual ratemaking under the South Carolina Rate Stabilization Act ("RSA").

Q. Does the Company's actual financial capital structure vary over time?

A. Yes, it does. The specific debt/equity ratio will vary over time, depending on a variety of factors, including, but not limited to, the timing and size of capital investments and payments of large invoices, debt issuances, seasonality of earnings, changes to inventory balances, equity infusions received from parent, and dividend payments made to the parent company. Achieving an approved regulatory capital structure as recommended above

1 The Company's capital structure as of March 31, 2022, as represented herein and throughout the Company's rate case application, reflects the projected capital structure as of March 31, 2022 at the time of preparation of this testimony and the cost of service computations supporting this rate case application. Piedmont's actual capital structure as of March 31, 2022 will be finalized and known after the close of the accounting books and records for the month of March 2022.

is consistent with the Company's financial objectives and overall plan to finance operations at favorable rates for customers. Piedmont will manage its capital structure within a reasonable range of this base.

Q. What cost rates did you attribute to each component of the Company's capital structure?

A. I utilized a cost rate of 4.08% for long-term debt and 9.90% for common equity.

Q. How were these cost rates determined?

A. For long-term debt, I used Piedmont's embedded cost of long-term debt as of March 31, 2022.[2] The derivation of this debt rate is shown on Exhibit_(CRB-2). The derivation of Piedmont's cost of common equity is discussed in the direct testimony of Piedmont witness Jim Coyne.

Q. How do Piedmont's proposed capital structure and cost rates compare to its most recently approved capital structure?

A. Under the RSA, Piedmont's base rates are reviewed and accordingly updated annually. In Piedmont's 2021 RSA proceeding,[3] the Commission approved the following capital structure: 47.80% long term debt, and 52.20% common equity, which was based on the Company's actual capital structure at March 31, 2021. The approved cost of equity in that

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2 The Company's embedded cost of long-term debt as of March 31, 2022, as represented herein and throughout the Company's rate case application, reflects the projected long term debt rate as of March 31, 2022 at the time of preparation of this testimony and the cost of service computations supporting this rate case application. The actual embedded cost of long-term debt as of March 31, 2022 will be finalized and known after the close of the accounting books and records for the month of March 2022.

3 Docket No. 2021-7-G

proceeding was 9.80% and the approved cost of long-term debt was 4.08%.

Q. Please explain credit quality and credit ratings, and how they are determined.

A. Credit quality (or creditworthiness) is a term used to describe a company's overall financial health and its willingness and ability to repay all financial obligations in full and on time. An assessment of Piedmont's creditworthiness is performed by two major credit rating agencies, Standard & Poor's ("S&P") and Moody's Investors Service ("Moody's"). Many qualitative and quantitative factors go into this assessment. Qualitative aspects may include an assessment of the regulatory climate in which Piedmont operates, Piedmont's record for delivering on its commitments, the strength of its management team, its operating performance, and the strength of its service area. Quantitative measures are primarily based on operating cash flow and focus on the level at which Piedmont maintains debt leverage in relation to its generation of cash and its ability to meet its fixed obligations (interest and principal payments in particular) on the basis of internally-generated cash. The percentage of debt to total capital is another example of a quantitative measure. Creditors and credit rating agencies view both qualitative and quantitative factors in the aggregate when assessing the credit quality of a company.

Q. What is the role of regulation in the determination of the financial strength of a utility company?

A. Investors, investment analysts, and credit rating agencies regard constructive and consistent regulation as one of the most important factors in assessing a utility company's financial strength. These stakeholders want to be confident the Company operates in a stable regulatory environment that will allow the Company to recover prudently-incurred costs and earn a reasonable return on investments necessary to meet the demand, reliability, service, safety, and environmental requirements of its customers and service area. Important considerations include the allowed rate of return, the cash quality of earnings, the timely recovery of capital investments, the stability of earnings, and the strength of its capital structure. Positive consideration is also given for utilities operating in states where the regulatory process is streamlined, the time lag in capital investment recovery is minimized through cost recovery mechanisms such as riders and trackers, and outcomes are equitably balanced between customers and investors.

Q. How are Piedmont's outstanding securities currently rated by the credit rating agencies?

A. As of the date of this testimony, Piedmont's senior unsecured credit ratings and outlooks are as follows:

Rating Agency	S&P	Moody's
Senior Unsecured	BBB+	A3
Outlook	Stable	Stable

Obligations carrying a credit rating in the "A" category are considered strong, investment-grade securities subject to low credit risk for the investor. "A" rated debt is presumed to be somewhat susceptible to changes in circumstances and economic conditions; however, the debt issuer's capacity to meet its financial commitments is considered strong. By contrast, ratings in the "BBB" (one level weaker than the "A" category) category are considered adequate and have less assurance of access to the capital markets in challenging market conditions.

S&P may also modify its ratings with the use of a plus or minus sign to further indicate the relative standing within a major rating category. An "A+" credit rating is at the higher end of the "A" credit rating category and an "A-"is at the lower end of the category. Moody's credit rating assignments use the numbers "1", "2" and "3", with the numbers "1" and "3" analogous to a "+" and "-", respectively. For example, Moody's credit ratings of "A2" and "A3" would be analogous to "A" and "A-" credit ratings at S&P.

The ratings outlook assesses the potential direction of a long-term credit rating over an intermediate term (typically six months to two years). Piedmont's "Stable" outlook at S&P and Moody's is an indication the credit ratings are not likely to change at this time, however a change in outlook or rating could occur if the Company experiences a change in its business or financial risk.

Q. Do Piedmont's customers benefit from the Company's strong credit ratings?

A. Yes. To ensure reliable and cost-effective service, compliance with federal pipeline safety regulations and to fulfill its obligations to serve customers, the Company must continuously plan and execute significant capital projects. This is the nature of regulated, capital-intensive industries like natural gas utilities. The Company must be able to operate and maintain its business without interruption and refinance maturing debt on time, regardless of financial market conditions. The financial markets can experience periods of volatility, and Piedmont must be able to finance its needs throughout such periods. Strong investment-grade credit ratings provide Piedmont with greater access to the capital markets on reasonable terms during such periods of volatility. Factors that negatively impact Piedmont's credit ratings, including an inadequate allowed return on equity or an inadequate equity percentage of the capital structure, have the potential to reduce the Company's access to the capital markets and to increase the cost of such access.

Approval of the Company's request in this case will support its financial objectives by allowing timely recovery of its investments in plant and equipment, providing sufficient cash flows to fund necessary capital expenditures and service debt.

Q. What strengths and weaknesses have the credit rating agencies identified with respect to Piedmont?

A. The rating agencies believe Piedmont operates in generally constructive regulatory environments that support long-term credit quality, and they also view the Company's customer growth profile and system integrity investments as credit supportive. However, the rating agencies have identified a number of challenges Piedmont faces in maintaining its credit ratings. In its July 2021 credit opinion, Moody's identified several factors that could adversely impact Piedmont's financial metrics (specifically, cash flow coverage ratios), which, in turn, could affect its ratings.[4]

<u>Capital Expenditures and Tax Reform</u>: Moody's notes elevated capital expenditures, the continued impact of federal tax reform, and the associated leverage to fund customer growth and system integrity investments will continue to pressure key credit metrics.

<u>Environmental and Social Considerations</u>: Moody's includes in their credit assessment of Piedmont the impact of regulations on carbon and methane through the production of energy.

<u>Going forward, Moody's expects that Piedmont will need to continue to seek numerous rate adjustments for timely recovery of investments and maintain a relatively constructive environment to maintain its current credit rating.</u>

4 *See* Moody's Investors Service, Credit Opinion, "Piedmont Natural Gas Company, Inc. – Update to Credit Analysis," July 16, 2021

Q. What role do equity investors play in the financing of Piedmont, and how will the outcome of this case impact these investors?

A. Equity investors provide the foundation of a company's capitalization by providing significant amounts of capital, for which an appropriate economic return is required. Piedmont compensates equity investors for the risk of their investment by targeting fair and adequate returns, stable cash flows, and earnings growth - all necessary to preserve access to equity capital. Returns to equity investors are realized only after all operating expenses and fixed payment obligations (including principal and interest) of the business have been paid. Because equity investors are the last to receive surplus earnings and cash flows, their investment involves significantly more risk. For this reason, equity investors require a higher return for their investment. Equity investors in Duke Energy expect its subsidiary utilities like Piedmont to recover their prudently-incurred costs and earn a fair and reasonable return for their investors. The Company's proposal in this proceeding supports this investor expectation.

Q. What effect does capital structure and return on equity have on credit quality?

A. Capital structure and return on equity are important components of credit quality. As mentioned in the previous answer, the greater the equity component of capitalization, the safer the returns are to debt investors, which translates into higher credit quality and lower borrowing costs. In addition, the allowed return on equity is a key component in the generation of earnings and cash flows. An adequate return on equity helps ensure equity investors receive fair compensation for their investment while also helping to protect the interests of debt investors. A strong capital structure and an adequate return on equity provide balance sheet protection and cash flow generation to support high credit quality. High credit quality creates financial flexibility by improving access to the capital markets on reasonable terms, and ultimately lower debt financing costs for customers.

Q. Do you believe Piedmont's capital structure has an adequate equity component to enable the Company to achieve its financial strength and credit quality objectives?

A. Yes. Piedmont' requested equity component of 54.56% enables it to maintain current credit ratings and financial strength and flexibility. Like many utilities, Piedmont is in a period of significant capital investment necessary to provide cost-effective, safe, and reliable service to its customers in a period of rising costs, growing customer load and evolving state and federal pipeline safety and integrity requirements. The magnitude of its capital requirements dictates the need for a strong equity component of the Company's capital structure in order to assure access to the capital markets at reasonable terms.

Q. What are Piedmont's capital requirements over the next three years?

A. Piedmont faces substantial capital needs over the next several years in order to comply with pipeline safety and integrity regulations, refurbish, replace, and upgrade aging infrastructure, support its growing customer base, and satisfy its debt maturities. The Company's capital requirements for the next three years (2022-2024) are projected to be $2.7 billion in projected capital expenditures and $85 million to refinance upcoming debt maturities.

Q. Do you anticipate Piedmont will be able to access sufficient debt and equity to support its ongoing operations without any problems?

A. I do, but the reasonableness of the terms upon which Piedmont can access those markets depends largely on Piedmont continuing to maintain favorable credit ratings. That, in turn, depends on the regulatory treatment Piedmont receives from the state public service commissions that regulate the Company.

Q. Can you explain?

A. Yes. Piedmont's investors and creditors carefully evaluate how we are regulated by this Commission, including what levels of allowed return are approved in our general rate proceedings. They are aware that allowed rates of return may vary over time with changes in general economic factors, but they also believe we operate in a generally constructive regulatory environment – a conclusion with which we agree and which we believe is a significant benefit to our customers. Any change in this assessment could raise capital costs for Piedmont and its customers. This vulnerability is especially acute in light of Piedmont's significant and ongoing investments in capital projects required to meet federal safety and integrity management requirements.

Piedmont management recognizes the Commission must balance the interests of customers with those of the Company when setting rates of return and capital structure in any general rate proceeding. At the same time, it is important to consider the long-term consequences these decisions can have on the terms under which Piedmont can access capital markets.

Q. Does this conclude your pre-filed direct testimony?

A. Yes.

Exhibit_(CRB-1)

Piedmont Natural Gas Company, Inc.
2022 SC Rate Case
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Exhibit_(CRB-1)

Capitalization Schedule

		[A]	[B]	[C]	[D]
		Actuals @12/31/21	Ratio @12/31/21	Projected @ 3/31/22	Ratio @ 3/31/22
[1]	Long-Term Debt (1)	2,963,504,829	46.95%	2,968,588,317	45.44%
[2]	Common Equity	3,348,947,563	53.05%	3,563,992,835	54.56%
[3]	Total	6,312,452,392	100.00%	6,532,581,153	100.00%

(1) Reflects the carrying value of Piedmont's Non-Current Long Term Debt.

Exhibit_(CRB-2)

Piedmont Natural Gas Company, Inc.
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Exhibit_(CRB-2)

Embedded Cost of Long-Term Debt projected for March 31, 2022

		[A]	[B]	[C]	[D]	[E]	[F]
			Less Unamortized	Pro Forma	Annual Cost		
		Principal	Debt Discount	LTD	Coupon	Debt Expense	
	Long-Term Debt (a)	Amount	and Expense	Total	Interest	Amortization	Total
	Senior Notes:						
[1]	3.47% - due 2027	$100,000,000	288,408	99,711,592	3,470,000	54,503	3,524,503
[2]	3.57% - due 2027	$200,000,000	590,497	199,409,503	7,140,000	111,590	7,251,590
[3]	4.65% - due 2043	$300,000,000	2,323,589	297,676,411	13,950,000	108,937	14,058,937
[4]	4.10% - due 2034	$250,000,000	1,745,415	248,254,585	10,250,000	140,038	10,390,038
[5]	3.60% - due 2025	$150,000,000	486,592	149,513,408	5,400,000	142,417	5,542,417
[6]	3.64% - due 2046	$300,000,000	2,906,266	297,093,734	10,920,000	118,221	11,038,221
[7]	3.50% - due 2029	$600,000,000	3,457,726	596,542,274	21,000,000	482,473	21,482,473
[8]	3.35% - due 2050	$400,000,000	6,013,696	393,986,304	13,400,000	213,504	13,613,504
[9]	2.50% - due 2031	$350,000,000	2,972,514	347,027,486	8,750,000	181,752	8,931,752
	Medium-Term Notes:						
[10]	6.87% - due 2023	$45,000,000	21,845	44,978,155	3,091,500	14,430	3,105,930
[11]	8.45% - due 2024	$40,000,000	31,803	39,968,197	3,380,000	12,893	3,392,893
[12]	7.40% - due 2025	$55,000,000	60,569	54,939,431	4,070,000	17,278	4,087,278
[13]	7.50% - due 2026	$40,000,000	52,014	39,947,986	3,000,000	11,502	3,011,502
[14]	7.95% - due 2029	$60,000,000	146,650	59,853,350	4,770,000	19,677	4,789,677
[15]	6.00% - due 2033	$100,000,000	465,273	99,534,727	6,000,000	39,710	6,039,710
	Unamortized Loss on Reacquired						
[16]	Debt - 6.25% IQ Notes		3,137,352	(3,137,352)	0	238,280	238,280
[17]	Credit Facilities Fee		1,112,829	(1,112,829)	0	327,000	327,000
[18]		2,990,000,000	25,813,037	2,964,186,962	118,591,500	2,234,206	120,825,706
[19]	**Embedded Cost of LTD**	**4.08%**					

(a) This schedule reflects the non-current portion of long term debt.